

LISTING OF THE CLAIMS

Claim 1. (Currently Amended): A semiconductor light emitting device comprising:

a hetero-configuration ~~having~~ consisting of an active layer that emits light when charge carriers are injected, a first clad layer, and a second clad layer, the active layer being interposed between the clad layers~~[[,]]the first and second clad layers each having an approximately equal layer thickness acting to keep the injected charge carriers in the active layer;~~

a first and a second electrode~~[[,]]~~ positioned external to and on opposite sides of the ~~layers of the hetero-configuration being interposed between the electrodes; and~~

a first dense defect layer provided ~~between the first electrode and~~ directly on the outer surface of one of the clad layers of the hetero-configuration, the first dense defect layer being made of a material having a concentration of crystal defects, a value of a lattice constant, and a thickness which together prevent at least some of the crystal defects generated remotely from ~~the layers of the hetero-configuration~~ from reaching any portion of the layers of the hetero-configuration.

Claims 2-10 (Canceled)

Claim 11, (New): A semiconductor light emitting device comprising:

a substrate;

a first clad layer of a first conductive type formed over the substrate;

an active layer directly formed on said first clad layer;

a second clad layer of a second conductive type directly formed on said active layer;

a defect layer directly formed on said second clad layer;
a current diffusion layer of the second conductive type formed on said defect layer;
a first electrode electrically connected to said first clad layer; and
a second electrode electrically connected to said current diffusion layer.

Claim 12. (New): A semiconductor light emitting device comprising:

a first defect layer;
a first clad layer of a first conductive type directly formed on said first defect layer;
an active layer directly formed on said first clad layer;
a second clad layer of a second conductive type directly formed on said active layer;
a second defect layer directly formed on a said second clad layer;
a current diffusion layer of the second conductive type formed on said second defect layer;
a first electrode electrically connected to said first clad layer; and
a second electrode electrically connected to said current diffusion layer.

C/ cm to

Claim 13. (New): The semiconductor light emitting device according to Claim 11, wherein the defect layer is of higher defect density than at least the second clad layer.

Claim 14. (New): The semiconductor light emitting device according to Claim 12, wherein each of said first and second defect layers is of higher defect density than at least the second clad layer.

Claim 15. (New): The semiconductor light emitting device according to Claim 11, wherein a material of said defect layer is 10^{-2} or more different in lattice constant from materials of said first clad layer, said active layer and said second clad layer.

Claim 16. (New): The semiconductor light emitting device according to Claim 12, wherein a material of each of said first and second defect layers is 10^{-2} or more different in lattice constant from materials of said first clad layer, said active layer and said second clad layer.

Cl
control
Claim 17. (New): The semiconductor light emitting device according to Claim 1, wherein a material of said defect layer is two or three mixed crystal selected from a group of consisting of In, Ga, Al, P, and As.

Claim 18. (New): The semiconductor light emitting device according to Claim 12, wherein a material of each of said first and second defect layers is two or three mixed crystal selected from a group of consisting of In, Ga, Al, P, and As.

Claim 19. (New): The semiconductor light emitting device according to Claim 11, wherein said defect layer is 10 nm or more in thickness.

Claim 20. (New): The semiconductor light emitting device according to Claim 11, wherein each of said first and second defect layers is 10 nm or more in thickness.

Claim 21. (New): An semiconductor light emitting device comprising:

a light emitter;

an electrode provided over said light emitter; and

a defect layer provided between said light emitter and said electrode.

Claim 22. (New): A semiconductor light emitting device comprising:

a substrate;

a first clad layer of a first conductive type formed over the substrate;

an active layer directly formed on said first clad layer;

a second clad layer of a second conductive type directly formed on said active layer;

a layer having a defect region, said defect region being directly formed on said second clad layer;

a first electrode electrically connected to said first clad layer; and

a second electrode electrically connected to said current diffusion layer.

Claim 23. (New): A semiconductor light emitting device comprising:

a first layer having a defect region;

a first clad layer of a first conductive type directly formed on said defect region of said first defect layer;

an active layer directly formed on said first clad layer;

a second clad layer of a second conductive type directly formed on said active layer;

a second layer having a defect region, said defect region of said second layer being

Appln. No. 08/578,980
Docket No. 0039-5461-2

directly formed on said second clad layer;

Cl
also

a first electrode electrically connected to said first clad layer; and

a second electrode electrically connected to said current diffusion layer.
